

TAKE SOUND
METER

DECLASS REVIEW by NIMA/DOD

a. The film transport.

(1) The right film.

(a) Extensive scratching and film adherence to the platen was occurring. This was caused by the film rubbing on the underside of the raised top glass platen. Additionally, an extreme electrostatic charge was being built-up between the glass platens by this rubbing. This deficiency has been cured by the undersign's designing and the shop's fabricating a new set of brackets to reposition the rear film roller to enable it to guide the film between the two platens. This roller was required to be lowered 0.237 inches!

(2) Both transports are extremely noisy. It is suspected that the noise is generated from a number of sources such as the motor, the clutch/brake unit, the gear transmission and the film guide rollers. Specifically, the sound level is increased from ambient levels of 42db, 51db and 58db on the As, Bs, and Cs

NO NOISE SPEC
BUT STILL CONSIDER
AN OVERPUN

SUBJECT: Wide-Field High-Power Stereoviewer

Approved For Release 2004/03/26 : CIA-RDP78B04747A002200020018-7

Measurements were made for the roller noise alone and the left set increased the ambient level of 58db on the Cs scale to 82db. A comparison with the [] motorized transports indicate that they only increase the ambient noise levels 22db, 19db, and 12db respectively on the As, Bs and Cs scales. In addition to the noise problem, it was found that the transport system does not supply enough power to the spools. Neither transport will wind film onto a fully loaded 9.5 inch reel. This is a specific failure of the contract "specifications."

DOESN'T MEET SPEC
OVERVIEW

b. Light Sources

(1) Brightness. The maximum brightness of the general illumination was found to be only 1300 ft. lamberts. The contract specifically states that 1700 ft. lamberts is required. Furthermore, at this maximum intensity level only 800 ft. lamberts illuminates the corners of the lighted area. This is a drop of over 60%--the contract only allowed a maximum intensity variation of 10%. At the lowest illumination setting there is preceivable flicker: another failure of the contractual terms.

WOULD TRY TO
ACHIEVE 3500-4500
FT-LAMBERTS BUT
WOULD BE A C.I.S.

(2) Noise. There is a significant light source buzz evident in both the cold cathode grids.

(3) The High Intensity Light Source. Although the High Intensity Light Source is significantly brighter than the cold cathode grid, the color of the light is very yellow. In addition, preliminary tests indicate that the Versatile Stereoviewer is capable of a higher resolving capability with the lower intensity white cold-cathode light source than with the yellow high intensity source. Furthermore, the high intensity source has been poorly implemented. Although the concept of tracking magnets was attractive, they had to be too large in order to achieve the magnetic flux required for proper tracking between the large spacing of the master and slave magnets necessitated by the raising cover glass platen. As a consequence, the

Approved For Release 2004/03/26 : CIA-RDP78B04747A002200020018-7

SUBJECT: Wide-Field, High-Power Stereoviewer

Approved For Release 2004/03/26 : CIA-RDP78B04747A002200020018-7

tracking ability is only marginal and the slave magnet (that one attached to the fibre optic cable) interferes with the general illumination masking shade. The master magnet assembly restricts the motion of the stereoscope's rhomboids, whereby, all rhomboid positions cannot be conveniently achieved.

- c. The four extrusions on the microscope transport casting interfere with the upper glass platen when it is completely raised. *NEED TO BE CUT OFF OVERVIEW*
- d. More film guides need to be added to enable the leading edge of the film to be easily positioned between the two glass platens during loading. *OVERVIEW*
- e. The clutch brake units on the film spools are applied when power is applied to the instrument. This makes loading the film difficult. *MINOR C.I.S.*
- f. There are many sharp corners on the instrument. *OVERVIEW UNDER HUMANITY ENGINEERING*
- g. Alignment of eyepiece extension

635 LIGHT TABLE

OVERRUN OF



STAT

3000 FT-LAMB
CHANGE OF CAMP GRID



MIS. REWORK

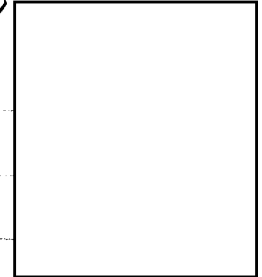
CHANGE IN-SCORE

STAT

→ FILM DRIVE NOISE

MAISON POLONOID

MIS. ITEMS



14-15 WKS

STAT

Approved For Release 2004/03/26 : CIA-RDP78B04747A002200020018-7

14 SEPT

1. 635 LIGHT TABLE

A. NOISE LEVEL ABSOLUTE GOAL 100db above ambient
20db MAXIMUM ACCEPTABLE

$A_s = 58$

$B_s = 66$

$C_s = 71$

B. 3500 FT-LAMB. BNCB.

C. WHEN ~~ARE~~ 2WKS AFTER REC. OF EQ.

D. CALL RE RETURN TIME

STAT

CALL ARMY RE ~~SP~~ TIME TO FIX MACHINES

Approved For Release 2004/03/26 : CIA-RDP78B04747A002200020018-7

10MM

1. THE VIEWING ANGLE WILL BE ~~30~~³⁵° (PER DRAWING)
2. THERE WILL BE NO FIELD REDUCTION
3. THE CONVERGENT ANGLE WILL BE SAME AS MICROSCOPE
AND INTERPUPILARY DISTANCE VARIATION WILL NOT
BE REDUCED.